

**§ 90.259 Assignment and use of frequencies in the bands 216–220 MHz and 1427–1435 MHz.**

Frequencies in the bands 216–220 MHz and 1427–1435 MHz may be assigned to applicants under this part provided the bands are listed in the individual radio service under which they establish eligibility. Use of these bands is limited to telemetering purposes, except that the 216–220 MHz band may also be used for wildlife and ocean buoy tracking operations pursuant to § 90.248. All operation is secondary to Federal Government operations, and operation in the 216–220 MHz band is also secondary to the maritime mobile service and operation in the 1427–1429 MHz band is also secondary to the space operation service (earth-to-space). Base stations authorized in these bands shall be used to perform telecommand functions with associated mobile telemetering stations. Base stations may also command actions by the vehicle itself, but will not be authorized solely to perform this function. Airborne use will not be authorized. Each application will be coordinated with the Federal Government by the Federal Communications Commission and is subject to such technical and operational limitations as may be imposed by the government. Each application should include precise information concerning emission characteristics, transmitter frequency deviation, output power, type and directional characteristics, if any, of the antenna, and the minimum necessary hours of operation.

[63 FR 64209, Nov. 19, 1998]

**§ 90.261 Assignment and use of the frequencies in the band 450–470 MHz for fixed operations.**

(a) Frequencies in the 450–470 MHz band as listed in § 90.20(c)(3) and § 90.35(b)(3) may be assigned to all eligibles for fixed use on a secondary basis to land mobile operations.

(b) Fixed stations located 140 km (87 mi) or more from the center of any urbanized area of 600,000 or more population are limited to a transmitter output power of 75 watts. Fixed stations less than 140 km (87 mi) from the centers of these areas are limited to a transmitter output power of 20 watts. Urbanized areas of 600,000 or more popu-

lation are defined in the U.S. Census of Population 1970, Vol. 1, Table 20, pages 1–74. The centers of the urbanized areas are determined from the Appendix, page 226, of the U.S. Department of Commerce publication “Airline Distance Between Cities in the United States.”

(c) All fixed systems are limited to one frequency pair with 5 MHz spacing and must employ directional antennas with a front-to-back ratio of 15 dB, except that omnidirectional antennas having unity gain may be employed by stations communicating with a minimum of three receiving locations encompassed in a sector of at least 160° in azimuth. Stations authorized for secondary fixed operations prior to (effective date of the rules) may continue to operate under the conditions of their initial authorization.

(d)–(e) [Reserved]

(f) Secondary fixed operations pursuant to paragraph (a) of this section will not be authorized on the following frequencies:

*Frequencies (MHz)*

|                     |                     |
|---------------------|---------------------|
| 451.800/456.800     | 453.08125/458.08125 |
| 451.80625/456.80625 | 453.0875/458.0875   |
| 451.8125/456.8125   | 453.09375/458.09375 |
| 451.81875/456.81875 | 453.125/458.125     |
| 452.525             | 453.13125/458.13125 |
| 452.53125           | 453.1375/458.1375   |
| 452.5375            | 453.14375/458.14375 |
| 452.54375           | 453.175/458.175     |
| 452.550             | 453.18125/458.18125 |
| 452.55625           | 453.1875/458.1875   |
| 452.5625            | 453.19375/458.19375 |
| 452.56875           | 454.000/459.000     |
| 452.575             | 454.00625/459.00625 |
| 452.58125           | 454.0125/459.0125   |
| 452.5875            | 454.01875/459.01875 |
| 452.59375           | 462.950/467.950     |
| 452.600             | 462.95625/467.95625 |
| 452.60625           | 462.9625/467.9625   |
| 452.6125            | 462.96875/467.96875 |
| 452.61875           | 462.975/467.975     |
| 452.925/457.925     | 462.98125/467.98125 |
| 452.93125/457.93125 | 462.9875/467.9875   |
| 452.9375/457.9375   | 462.99375/467.99375 |
| 452.94375/457.94375 | 463.000/468.000     |
| 452.950/457.950     | 463.00625/468.00625 |
| 452.95625/457.95625 | 463.0125/468.0125   |
| 452.9625/457.9625   | 463.01875/468.01875 |
| 452.96875/457.96875 | 463.025/468.025     |
| 453.025/458.025     | 463.03125/468.03125 |
| 453.03125/458.03125 | 463.0375/468.0375   |
| 453.0375/458.0375   | 463.04375/468.04375 |
| 453.04375/458.04375 | 463.050/468.050     |
| 453.075/458.075     | 463.05625/468.05625 |